

would work as a hardship on the raiyats in the first few years. The following resolution was passed by the Committee:—

"Resolved that water for the growth of green manure crops may be given free for the first three years, and after that period, a water rate should be levied as the Committee consider that the charge is a legitimate one. Taking of water will be optional, and the rate to be levied may be considered at the end of three years."

Government are pleased to accept the recommendation contained in the above resolution of the Krishnarajasagara Working Committee and direct accordingly.

S. SRINIVASA AIYAR,  
Offg. Secretary to Government,  
Krishnarajasagara Works.

#### Sanctions modified estimates for the Irwin Canal from the Krishnarajasagara.

READ—

Government Order No. 27-34—K. S. S. 94-101, dated 9th July 1926, appointing a Committee with Sir M. Visvesvaraya as Chairman for advising Government as to the measures necessary for development of irrigation under the reservoir and particularly the scope of the Scheme to be sanctioned with a programme for grants and execution.

2. Government Order No. P. W. 15-24—K. S. S. 95-104, dated 7th July 1927, sanctioning the project for the North Bank High Level Canal from the Krishnarajasagara.

3. Government Order No. 490-91—K. S. S. 2671-72, dated 6th December 1928, sanctioning detailed estimates for Rs. 19 lakhs for the Maddur Branch Works of the Irwin Canal for irrigating 27,000 acres.

4. Government Order No. C. 75-76—K. S. S. 444-45, dated 30th March 1931, sanctioning detailed estimates amounting to Rs. 73½ lakhs for the Cauvery Main Branch and some of its sub-branches for irrigating 63,000 acres.

5. Government Order No. 1216-17—K. S. S. 4664-65, dated 30th June 1931, sanctioning revised estimates for the first three sections amounting to Rs. 132'27 lakhs against Rs. 139'27 lakhs originally sanctioned.

6. Government Order No. C. 93-120—K. S. S. 550-97, dated 8th June 1931, passing orders on the several recommendations made by the Krishnarajasagara Committee, re the development of irrigation under the Irwin Canal.

7. Government Order No. 53-80—K. S. S. 174-201, dated 11th July 1931, sanctioning the adoption of the same system of irrigation under the Main Canal in the first section between the Dam and the Tunnel as was sanctioned in the case of the third section under the several branches of the Irwin Canal beyond the Tunnel.

8. Government Order No. 230-47—K. S. S. 622-39, dated 6th August 1931, constituting a Development Fund for financing various schemes relating to development of irrigation under the Irwin Canal.

9. Government Order No. 169-96—K. S. S. 533-60, dated 4th August 1931, constituting a Working Committee for creating facilities for development of irrigation under the Irwin Canal.

10. Note No. D. 136—K. S. S., dated 16th October 1931, from the Secretary to Government, Krishnarajasagara Works, submitting modified estimates for the Irwin Canal Scheme amounting to Rs. 193'07 lakhs.

ORDER NO. 1016-39—K. S. S. 3376-99, DATED 23RD DECEMBER 1931.

In Government Order No. P. W. 15-24—K. S. S. 95-104, dated 7th July 1927, Government accorded administrative sanction to an estimate amounting to Rs. 223 lakhs for the High Level Canal Project, and sanctioned detailed estimates amounting to Rs. 120'27 lakhs for the first and second (or Tunnel) sections of the High Level Canal from the Dam to the end of the Tunnel and execution was started immediately. Detailed estimates amounting to Rs. 19 lakhs were subsequently sanctioned in Government Order No. 490-91—K. S. S. 2671-72, dated 6th December 1928, for one of the branches going towards Maddur to irrigate about 27,000 acres, and the construction was put in hand immediately thereafter. By the end of June 1931 an outlay of about Rs. 124 lakhs has been incurred on the above works. All the important main works in these sections have now been completed and the Canals are ready to run water and

have been tested by allowing water for trial purposes. The trials have shown that the canals are functioning satisfactorily and that the losses in transmission are likely to be less than was assumed in the project. The works remaining to be done are minor surface works of a miscellaneous nature relating to the distribution of water. It is considered undesirable to keep the large estimates open for a long time, and the main estimates in these sections are, therefore, ordered to be closed, fresh estimates being opened and operated upon for the minor surface works remaining to be done. The outlay already incurred and the cost of minor works still remaining to be done, together amount to Rs. 129.15 lakhs against Rs. 139.27 lakhs sanctioned resulting in a saving of Rs. 10.12 lakhs, taking into account a credit of about Rs. 1 lakh on account of Buildings, Tools and Plant, Machinery and Materials, in connection with the completed works. It is stated that the saving of Rs. 9.12 lakhs is mainly due to the departmental system of execution adopted on these works.

2. The Krishnarajasagara Committee in their Resolution No. 10, dated 23rd March 1931, have recommended that the distribution of the areas selected for irrigation under the several branches of the Irwin Canal may be revised with a view to minimise the capital cost of the scheme by a greater concentration of the irrigable areas. Concentration of irrigation to the best soils and the most favourable irrigable areas nearest to the dam is obviously economical in point of cost of construction as well as of working as distribution losses are minimised and the area irrigated is increased. The Soil Surveys recently conducted jointly by the Agricultural and Engineering Departments have shown that such a re-distribution of areas is possible without affecting the reserves of dry lands already allowed around towns and villages in the irrigation tract, as suggested in the proceedings of the Krishnarajasagara Committee, dated 20th April 1928.

3. A revision of the estimates is also found to be necessary on account of the reduced rates at which it is possible to have the remaining works carried out. In view of the considerations indicated above, the estimates for the Canal Scheme for irrigating 120,000 acres have been modified and amount to Rs. 198.07 lakhs against Rs. 222 lakhs originally sanctioned. The reduction of Rs. 23.93 lakhs on the capital cost of the scheme is stated to be due to (1) the savings of Rs. 10.12 lakhs owing to the adoption of the departmental system of execution and to the anticipated realisation of about Rs. 1 lakh from sale of Machinery, Tools and Plant, Materials, Buildings, etc., on completed works, (2) the savings of about Rs. 7.13 lakhs due to revision of areas under the several branches with a view to increased concentration and (3) the savings of about Rs. 6.68 lakhs anticipated on account of reduced rates for the works still to be executed.

4. According to the Five Year Financial Programme recommended by the Krishnarajasagara Committee in paragraph 30 of their report, dated 22nd May 1927 an aggregate grant of Rs. 180 lakhs was contemplated between 1927-28 and 1931-32 for completing the first and second section works and such of the works in the third section as would be required to bring 60,000 acres under irrigation. The actual outlay to end of 1930-31 has been about Rs. 124 lakhs, and with the grant of about Rs. 16 lakhs for 1931-32, the outlay on the Canals to end of 1931-32 is expected to be about Rs. 140 lakhs against Rs. 180 lakhs contemplated by the Committee. On account of the anticipated low grants for capital works in the next few years, the Secretary to Government, Krishnarajasagara Works, has proposed that the programme of irrigation development and of the completion of the Canal Works to bring under irrigation the total extent of 120,000 acres may be re-arranged in three stages as under:—

(1) The first stage relates to the works already sanctioned and nearing completion, and will bring under irrigation an extent of 40,000 acres by July 1932 under the Main Canal between Dam and the Tunnel, under the Maddur Branch already excavated and under the first few miles of the Cauvery Main Branch. The outlay on the Canals for this first stage will be Rs. 140 lakhs out of which Rs. 124 lakhs have been incurred to end of June 1931.

(2) The second stage will bring an additional extent of 26,000 acres under irrigation in the course of three years from 1932-33 by the completion of the Cauvery Main Branch and the Keralpur branch works. The cost to be incurred during these three years will be about Rs. 35 lakhs and the total outlay on the scheme by the end of June 1935 will stand at Rs. 175 lakhs for an irrigated extent of 66,000 acres.

(3) The third stage securing the remaining extent of 54,000 acres coming under the Hobbakavadi, Lokasara, Nidaghatta, Turaganur and Arakere branches that take off at the end of the Cauvery branch will cost Rs. 23.15 lakhs, and the programme of distribution of grants for taking up these

branch channels may be considered after June 1935 according to the financial situation at the time, the nature and extent of irrigation development in the localities already served by that time and the keenness of demand for water for irrigation under the several branches.

5. It is stated that the proceeds from sale of Government irrigable lands coming under the canals are not taken into account in the estimates for the Scheme for Rs. 198.07 lakhs, that an amount of Rs. 15 lakhs may be expected from this source and that after allowing for a sum of Rs. 3 lakhs which will be set apart for Development Fund according to G. O. No. 230-47—K. S. S. 622-39, dated 6th August 1931, the remaining amount will be Rs. 12 lakhs and that if this amount is taken into calculation, the estimated cost of the scheme will be reduced to Rs. 186.07 lakhs.

6. The total grant required for the Canal Works during the next three years from 1932-33 to 34-35 will be about Rs. 35 lakhs, excluding the credit of about Rs. 1 lakh expected from sale of machinery, tools and plant, etc., on completed works.

The realisations from sale of Government lands and from recovery of contributions in the course of the next three years are expected to be about Rs. 14 lakhs. Assuming that only half of this amount will be collected, an additional grant of Rs. 28 lakhs will be required in the next three years, for raising the area under irrigation to 66,000 acres.

The expenditure to be incurred on the Dam Works at end of 1931-32, a large part of which is for compensation, will be about Rs. 15 lakhs. The total grant required for the Dam and Canal Works during the next three years is, therefore, stated to be about Rs. 50 lakhs. Taking into account a sum of Rs. 7 lakhs expected from contributions and sale of Government lands, the net grant required will be Rs. 43 lakhs and it is proposed that the annual allotments for the next three years both for the Dam and Irwin Canal Works may be fixed at Rs. 16, 14 and 13 lakhs exclusive of the realisations from contributions and sale of Government lands.

7. In the circumstances stated above, the Secretary to Government, Krishnarajasagara Works, has submitted the following proposals:—

(1) Administrative sanction may be accorded to the revised scheme for the Irwin Canal Works amounting to Rs. 198.07 lakhs.

(2) Detailed working estimates for Rs. 41.47 lakhs for the Cauvery Main Branch on the basis of revised areas and reduced rates for irrigating 20,000 acres may be sanctioned.

(3) Detailed working estimates amounting to Rs. 3.50 lakhs for the Keragod branch taking off from the Maddur Branch for irrigating 10,000 acres may be sanctioned.

(4) As only the estimates for the Keragod and Cauvery Main Branches amounting to Rs. 44.97 lakhs are to be operative for the present, the sanction already accorded for the estimates amounting to Rs. 73.5 lakhs in G. O. No. C. 75-76—K. S. S. 444-45, dated 30th March 1931, for the Cauvery Main Branch and some of its sub-branches may be cancelled, and

(5) After the excavation of the Cauvery Main Branch is completed, detailed working estimates for the sub-branches of the Cauvery Branch expected to cost about Rs. 23.15 lakhs may be prepared and sanction obtained thereto.

8. The above proposals are well considered and Government are pleased to approve of them. They note, with satisfaction, the economies effected in the execution of the works. Administrative sanction is accorded to the modified estimates amounting to Rs. 198.07 lakhs for the whole Irwin Canal Scheme. The similar sanction given for the original estimates amounting to Rs. 222 lakhs in G. O. No. 15-24—K. S. S. 95-104, dated 7th July 1927, is cancelled. The detailed working estimates amounting to Rs. 41.47 lakhs for the Cauvery Main Branch and to Rs. 3.5 lakhs for the Keragod branch are sanctioned. The sanction already accorded to the detailed estimates amounting to Rs. 73½ lakhs in G. O. No. C. 75-76—K. S. S. 444-45, dated 30th March 1931, for the Cauvery Main Branch and some of its sub-branches is cancelled.

The financial programme proposed in paragraph 6 above for the next three years for the Dam and Irwin Canal Works is provisionally approved.

9. The Canal Works under execution during the next three years will be the following:—

(a) Cauvery Main and Keragod Branches (Rs. 44.97 lakhs), *vide* para 7 *supra*.

(b) Remaining minor surface works and those relating to distribution on the Main Canal, the Tunnel and the Maddur Branch (Rs. 7 lakhs.)

(c) Sluices and distributaries between the Dam and the Tunnel (Rs. 79,900) sanctioned in G. O. No. 81—K. S. S. 202, dated 11th July 1931.

10. Prompt action should be taken to dispose of the Machinery, Tools and Plant, Buildings, Materials, etc., released from works as they are completed and to credit the sale proceeds to the capital account. Active steps should also be taken for the sale of Government irrigable lands under the sections of the Canal already completed and for recovery of contributions as they fall due.

11. Government await the proposals of the Krishnarajasagara Working Committee regarding the facilities required for the rapid development of irrigation in the area commanded by the Canal.

S. SRINIVASA AIYAR,  
Offg. Secretary to Government,  
Krishnarajasagara Works.

#### Working of the Electrical Department for the year 1930-31.

READ—

Letter No. C/1769, dated the 24th October 1931, received from the Chief Electrical Engineer, submitting the Administration Report of the Electrical Department, for the year 1930-31.

ORDER NO. E. D. S. 909-918, DATED 15TH JANUARY 1932.

The budget estimate of the Electrical Department for the year 1930-31 under "Receipts" was Rs. 50'36 lakhs. The actual receipts amounted to Rs. 50'68 lakhs, showing an increase of Rs. 32,000 over the budget figure.

2. *Demand, Collection and Balance.*—The gross demand for the year was Rs. 52,74,802 including the previous arrears amounting to Rs. 2,52,303. The collection, which amounted to Rs. 50,41,499, shows an increase of Rs. 2,96,322 over the figure for the year 1929-30. The increase in the demand is due to extensions of power and lighting installations in Bangalore, Mysore and mofussil towns, and also to the supply of power to certain rural areas. It is satisfactory to note that the actual realisations were Rs. 76,499 more than the anticipated revenue and Rs. 35,499 more than the original budget estimate. This is stated to be due to the extra revenue realised in some of the sections like Bangalore, Mysore and Hulikere. The arrears of revenue at the end of June 1931, amounted to Rs. 2,36,691 as against Rs. 2,53,354 at the end of June 1930. Of this, a sum of Rs. 1,85,813 due from the Mining Companies, has since been realised, and the balance of Rs. 50,878 mostly represents dues from Government Departments and Municipalities. It is noted that every effort is being made to bring down the arrears. In this connection, the Chief Electrical Engineer's attention is invited to G. O. No. E. D. S. 721-4, dated the 22nd April 1927, prescribing the procedure for the recovery of dues on power bills payable by Government Departments and Municipalities to the Electrical Department.

3. *Working Expenditure.*—The working expenditure of the Department during the year was Rs. 11,18,625 as against Rs. 10,40,966 in 1929-30 and works out to 22.18 per cent of the gross receipts. The increase was due chiefly to the increase in maintenance and establishment charges on account of the new installations in addition to the normal increase of expenditure under establishment and salaries.

4. *Revenue Returns.* The net revenue during the year after setting apart the contribution of Rs. 4,85,646 to the Depreciation Fund was Rs. 33,97,862 as against Rs. 32,40,101 in the previous year, resulting in a return of 12.81 per cent on the total capital of Rs. 2,65,42,173 excluding any part of the cost of the Krishnarajasagara Works, as against 12.75 per cent during 1929-30. The slight increase of 0.06 per cent is due to the normal growth of the Department. While reviewing the Administration Report of the Electrical Department for the year 1929-30, Government observed that the net returns on electrification of mofussil towns and on pumping installations should be shown separately in future. In accordance with this direction, the